BASIC ELECTRONICS

2nd Exam/ECE/Comp/CSc/IT/EEE/ECE-II/0664/2661/Nov' 2016

Duration:3 Hrs **M.Marks:75**

SECTION – A

Q1 . Attempt all Questions **15x1=15**

(a) Valence electrons are present in …… orbit of an atom**.**
(b) The process of adding impurity to an intrinsic semiconductor is called ……
(c) The value of knee voltage for silicon diode is…….. volt.
(d) Zener diode is made to operate in …… region.
(e) The maximum efficiency of full- wave rectifier is ……..
(f) A transistor contains …… PN junctions.
(g) An ideal value of stability factor is ……
(h) The point of intersection of DC and AC load line is ……..
(i) FET stands for ……
(j) FET is a ……. Polar device.
(k) PIV Stands for …….
(l) The …….biasing is most widely used
(m) The emitter of a transistor is doped …….
(n) The minority carriers in N type semiconductors are ……
(o) MOSFET has …… terminals

SECTION – B

Q2. Attempt any five Questions **5x6=30**

(a) Define doping .
(b) Write a note on Zener diode.
(c) Why a bridge rectifier is preferred over a center-tap full wave rectifier?
(d) Explain the working of PNP transistor with diagram..
(e) Write a note on stabilization and what is its need.
(f) Write down the significance of h-parameters.
(g) Distinguish between FET and BJT.

SECTION – C

Q3. Attempt any three Questions **3x10=30**

(a) Draw and explain the V-I characteristics of PN junction diode.
(b) Draw and explain the Common Emitter Characteristics.
(c) Explain potential divider bias circuit with diagram.
(d) Explain the circuit diagram of single stage transistor amplifier.
(e) Explain the construction and operation of FET.